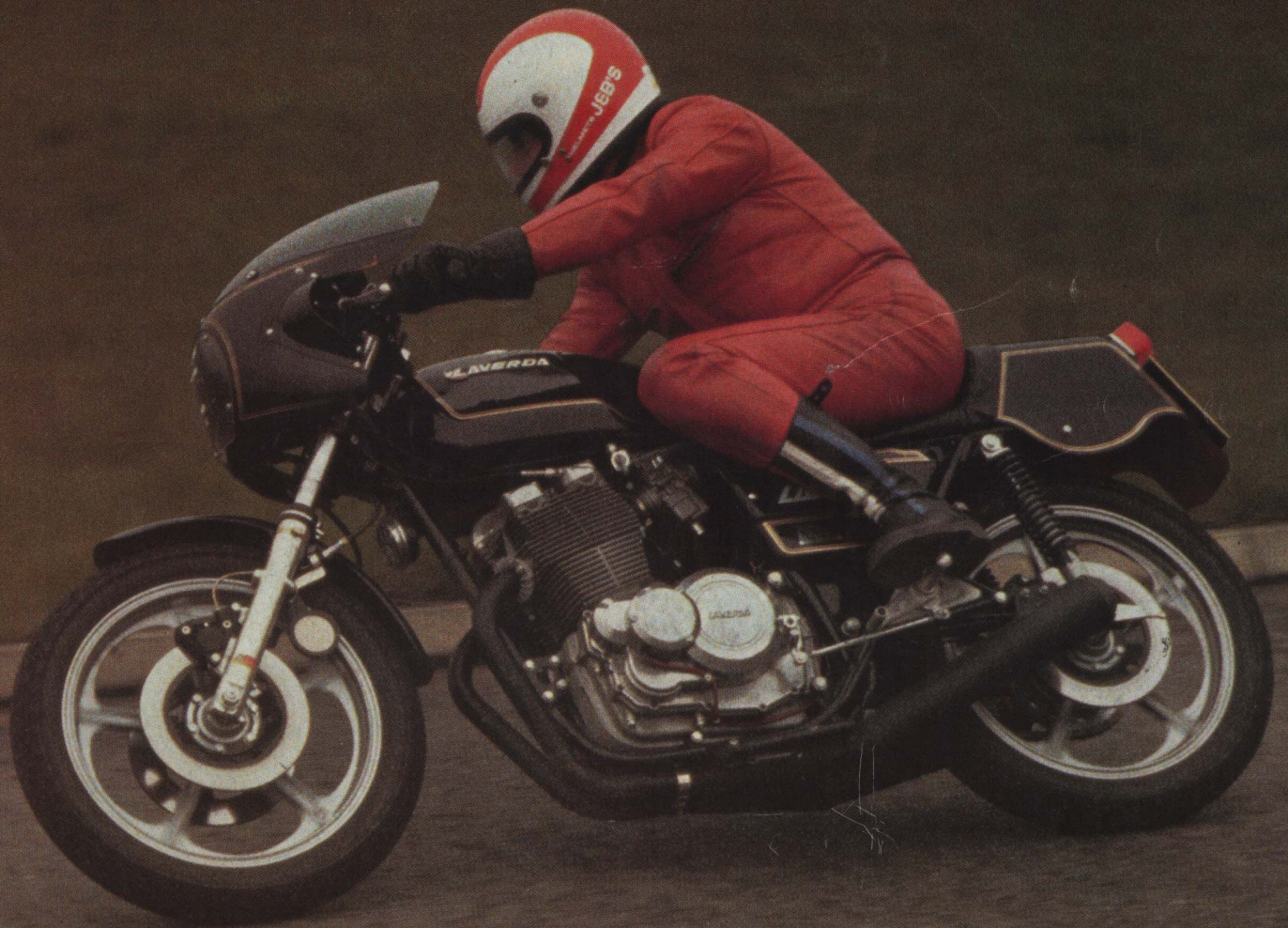


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# YOU GOTTA BEAT THE CLOCK



by John Marrison

'What looks right goes right' is an old well worn adage, not true in all cases, but with Paul Andrews' Pro-Stocker, 'Crusader MK 11' you can immediately see a machine that looks so right and goes even better.

Of course, the other old drag racers saying 'If it don't go, chrome it and saint it' can also be quoted, but with Paul Andrews machine, competitors will testify.

Paul's machine started life as a standard Z1000 MK11 Kawasaki and as such was used as a 'ride to work' transport, and if you happen to be the type who is always late leaving home, then that is a great mode of transport to be on.

As with many of us, Paul made the pilgrimage to Santa Pod, to spectate at one of the then comparatively rare drag meetings, and having seen other people endeavouring to destroy engines and rear tyres, decided that he could show the others how to do it!

The first outing for man and machine was in July 1979 and the only 'mods' at this time were made to allow entry into the 'Street Bike' class. Best time for Paul at this meeting was 12.04sec with a 105.7 terminal, not bad, but not good enough to win.

Progressive mods were made to the machine during '79, allowing Paul to come third in the N.D.R.C. Points Championship despite having competed in only two of the four rounds. The major mod in terms of cash outlay, made during this initial season, was the fitment of a set of 29mm smoothbore carbs, together with an S & S 4 into 1 exhaust, and more sticky Pirelli Phantoms.

The bug having bitten hard Paul looked at the 1980 season, took a deep breath, then proceeded to produce a machine that was as radical as the then rules allowed.

The following list of mods shows only part of the story, as anyone who has built up their own machine will tell you.

Many, many hours of burning the midnight oil are only the basic essentials. Also required is a great deal of patience and a belief that the machine you are treating will justify the time and expense lavished upon it.

In Paul's case, he also has an additional advantage, in that his girl friend, the delightful Debbie seems to be blessed with at least a similar amount of patience as Paul himself. It takes a particularly solid type of relationship to accept the necessity of spending Saturday night working on the bike, when everyone



else is living it up.



Around about now, I can hear those people in the know muttering about Paul being employed by Kawasaki Motors, with all the supposed advantages that this brings.

During 1979 and 1980 Paul built and financed his machine without any assistance whatsoever shown, limited assistance under the auspice of Kawasaki Dealer Team Drag Race, has been made available to Paul, as indeed it has been made available to several of his competitors using the Z1000 motor.

As with the best laid plans of mice and men, Paul's machine was not ready to run until June of 1980. As anyone who has attempted to bring together parts from both sides of the Atlantic for a deadline, will confirm, this is about as impossible as standing up in a hammock.

However, late though the 1980 debut may have been, it was a sign of things to come, and certainly made up for all the effort extended.

A time of 11.56 sec with a terminal of 124 mph at Long Marston with a virtually new machine on a surface not noted for traction, showed the potential

of the machine, it also showed the necessity for employing, new riding techniques to control the phenomenal power output, a lot of which was disappearing in wheelspin.

By the next meeting at Santa Pod, in August, with a combination of stickier tarmac, improved riding technique and fine tuning to carburation, ride height, etc. Paul dipped into the magic 10 second bracket with a hard charging run of 10.87 sec with a 134.9 mph terminal.

Traction was an ever present embarrassment at this time, and robbed Paul of many potential class wins, the power being produced was just too much for a standard treaded road tyre.

Disaster struck in the form of a missed shift into second gear, resulting in the revs soaring beyond 14,000 rpm with a consequent coming together of pistons and valves.

Despite these problems and the late start to the season, Paul ran consistent to second times, obviously having learned how to employ the necessary techniques of power application.

A personal best time of 10.25 with a terminal of 140mph was achieved at the October Santa Pod meeting, resulting in a class win. In addition Paul rounded off 1980 by taking the NDRC class record at Long Marston with a time of 10.64 sec at 131 mph.

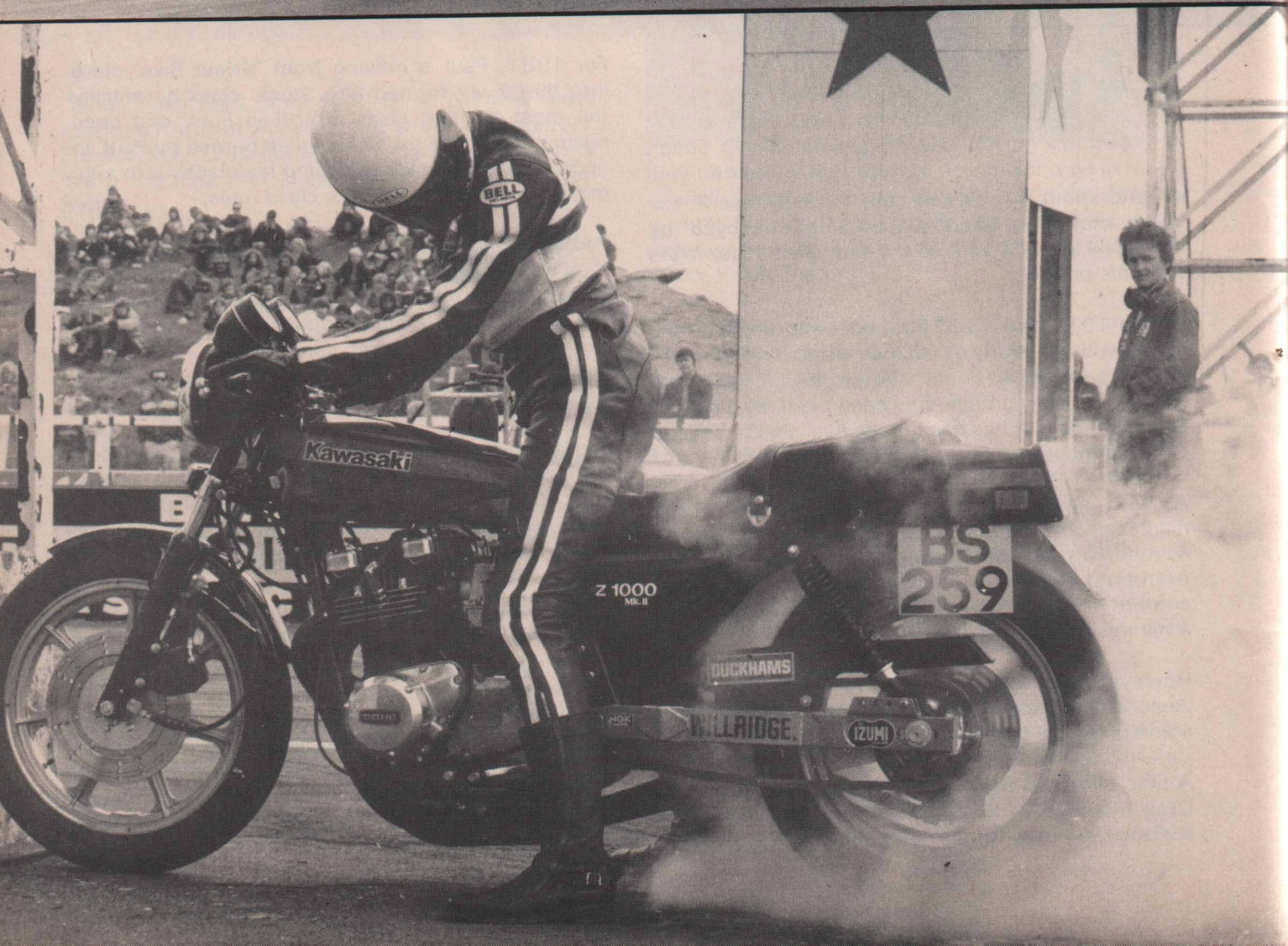
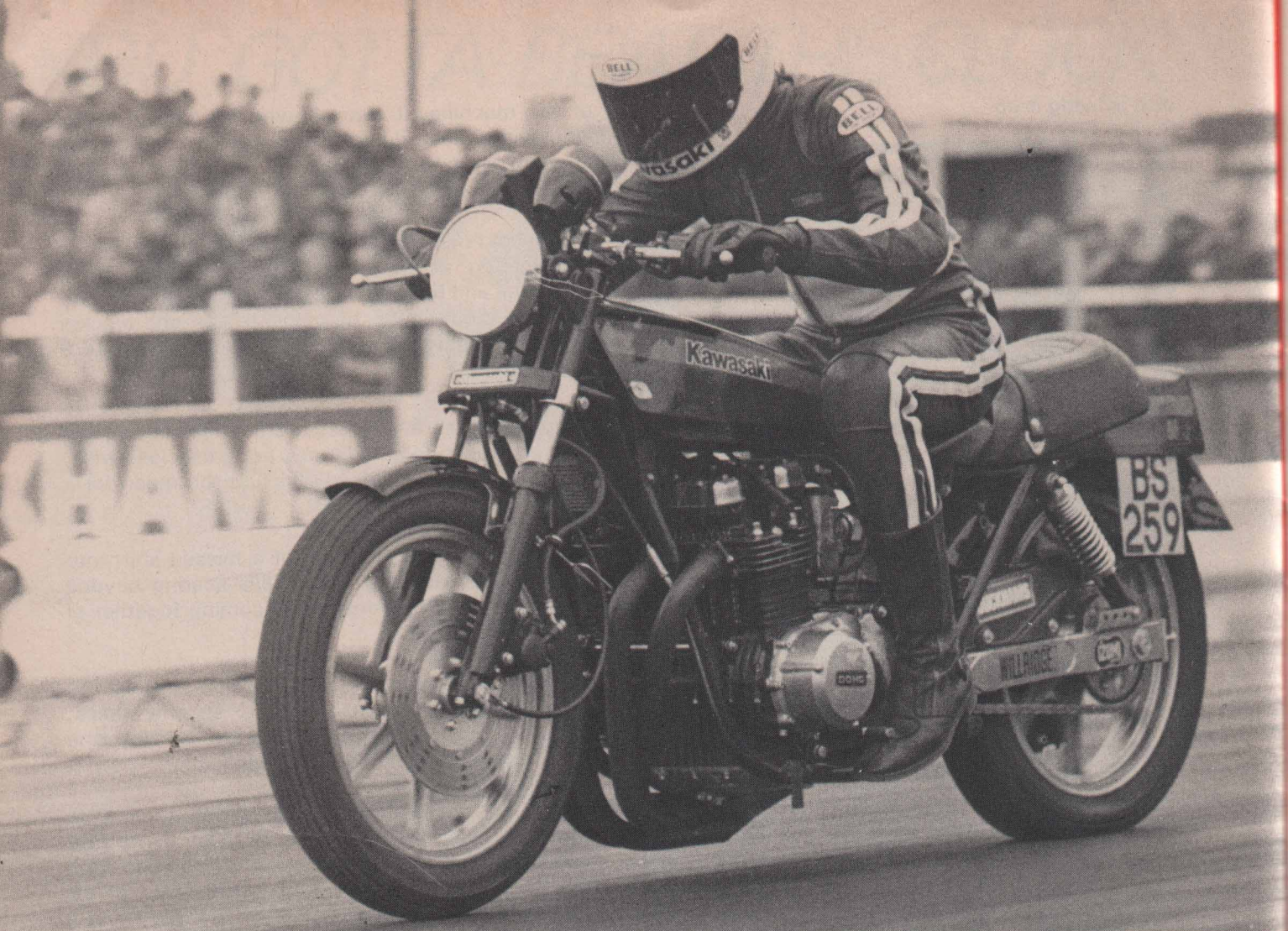
For 1981, Paul is moving from 'Street Bike' class into the newly formed 'Pro Stock' class potentially the most exciting class after Top Fuel, and once again much midnight oil has been burned by Paul, in once again drastically re jiggging his machine to take maximum advantage of the class rules.

Perhaps now with the use of a genuine drag racing slick and wheelie Cars, it will be possible for Paul to utilise the full potential of his machine, however all will not be easy for him as opposition in this class is if anything even fiercer than before, with such opposition as Brian Johnson, Pip Higham, Steve Tong and Tony Huck.

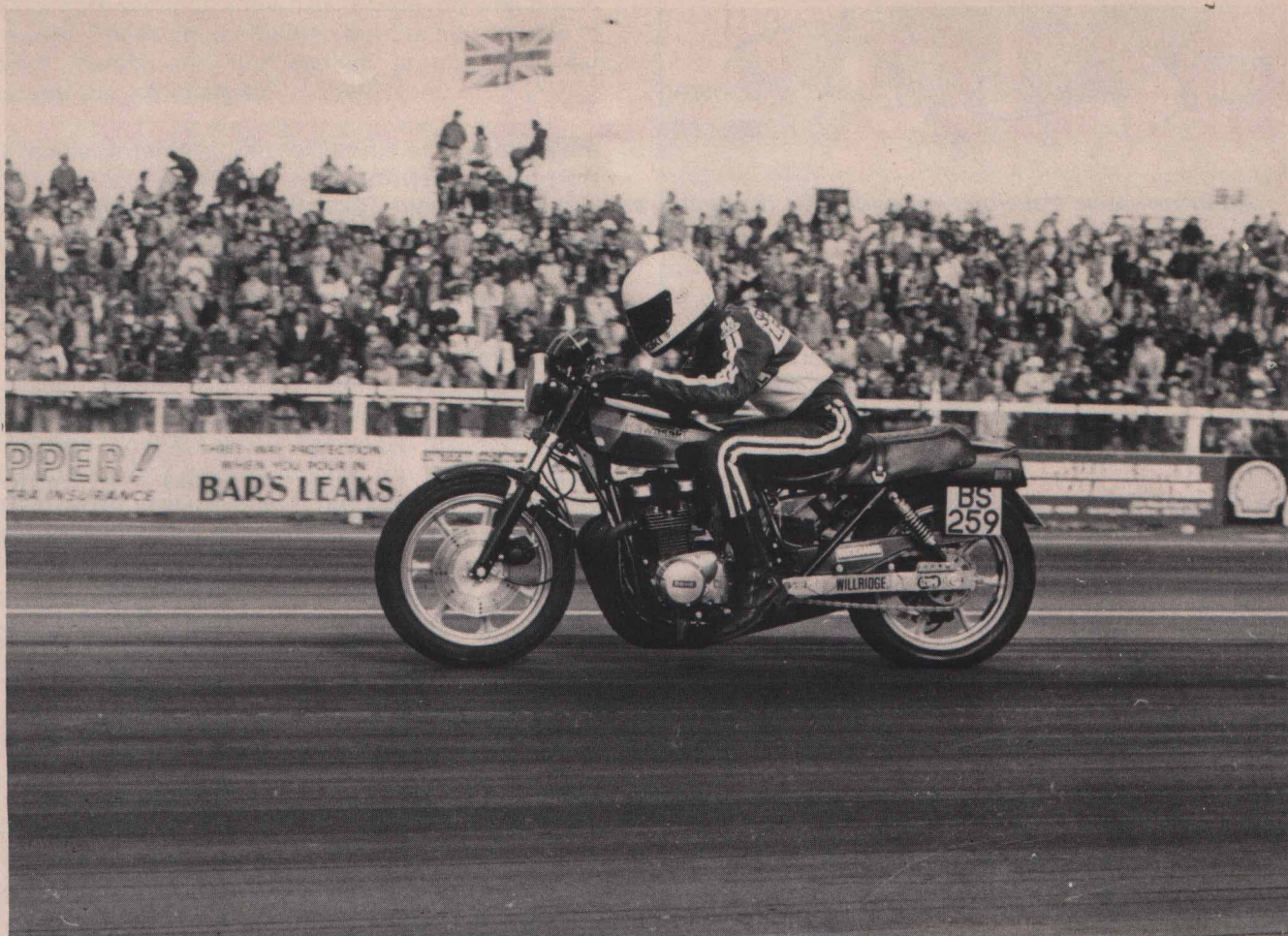
It is a measure of the goodwill that exists between competitors in drag racing that one of the people most helpful to Paul has been Brian Johnson, supplying advice and VS tuning equipment, despite being one of Pauls main adversaries.

As an example of true craftsmanship it would be difficult to single out a better example than the rather special swinging arm, manufactured for Paul by Willridge Fabrications. This company too is supplying assistance to Paul for 81, not only in the form of sponsorship, but alas as any competitor will confirm in that important aspect of manufacturing the myriad of small items such as spacers also carriers etc. which make the difference between a good bike and a superb one,









Only time will tell if Paul and 'Crusader MK 11' can produce the results during 1981, to say that he has the confidence of everyone here behind him, would be a masterpiece of understatement, but as any drag racing competitor or spectator knows only too well a quarter of one mile can be one hell of a long way.

Keep watching this column for updates on the performance of this beautifully prepared machine, it should prove interesting!

#### CHASSIS MODS:

3" longer than stock to increase wheelbase + prevent "Wheelies".

"Torque arm" design to above (outrigger on drive side) to prevent swing arm twist when under power. Z650 shock absorbers "laid down".

Morris magnesium wheels, both 18" with Dunlop (Z1-R) 3.75 x 18 on front + Avon Roadrunner 4.70 x 18 rear. Single disc brake on each wheel.

Dummy fuel tank used to save weight fuel carried in small tank underneath capacity 6 pints, sufficient for 3-4 runs.

Home-made wiring harness to eradicate unnecessary systems. Only ignition, lighting, horn brake light and kill switch retained.

Flat handlebars.

Front forks lowered further. Only 1" front movement retained.

Centre + side stands removed and frame "de-lugged" to save weight.

Seat padding removed to lower seat height.

#### ENGINE MODS:

Full race engine prepared.

MTC Engineering components chosen after studying all manufacturers of high performance products, noting their durability + achievements. At that time MTC held most major class titles in United States. Cylinder head + barrel were prepared in USA. Main mods: Cylinder head gas flowed and modified to incorporate high-lift camshafts. Copper head gasket + sealing rings, stainless valves etc.

Barrel bored and new liners fitted 76mm to increase capacity to 1197cc. 12½: 1 CR forged pistons. Ultra thin compression ring with "gas ports" in top of piston and three piece oil control ring. Light gudgeon pins held in with teflon buttons instead of circlips.

Crank very strong std but welded crank pins to prevent twisting. Alternator, flywheel and starter mechanism removed to save weight.

Extra-plate clutch with copper plated steel plates and thinner friction plates housed in std clutch basket and pressure plate. Small radical race bearing located in centre of pressure plates rests on "mushroom pusher" and prevents push rod ball bearing friction welding to the rod.

Breathing thru' 4 x 34mm Amal MK2 concentric carbs moun ted on a linkage to allow the use of one throttle cable + ease synchronisation.

(Sump pan plate in crankcase to hold oil in vicinity of no. 2 + 3 cyl big ends + "gate" in sump to control surge of oil to back of crankcase + away from oil pump pick-up under heavy acceleration).